DYNAMIC RADIANT FOOD PREPARATION METHODS AND SYSTEMS

ABSTRACT OF THE DISCLOSURE

A continuous oven for heating a food product having an outer surface and an interior includes an enclosure with a first heating zone and a second heating zone. A conveyor is configured to convey the product from the first heating zone to the second heating zone. At least one surface-browning infrared emitter is adjacent the first heating zone of the conveyor and is configured to provide a first electromagnetic radiation profile to the product in the first heating zone that is adapted to evaporate surface moisture to produce a crust matrix on the outer surface of the product. At least one interior-heating infrared emitter is adjacent the second heating zone of the conveyor and is configured to provide a second electromagnetic radiation profile to the product in the second heating zone that is different from the first electromagnetic radiation profile. The second electromagnetic radiation profile is adapted to heat the interior of the product. This configuration can produce food products that have characteristics approximating immersion-fried food products.